THE COVNTRY HOVSEWIFES GARDEN,

Containing Rules for Hearbs and Seeds of common vse, with their times and seasons, when to set and sow them.

TOGETHER

With the Husbandry of Bees, published with secrets very necessary for euery Housewife.

As also diuers new Knots for Gardens.

The Contents see at large in the last Page.

GEN. 2. 29.

I haue giuen vnto you euery Herbe, and euery tree, that shall be to you for meate.

London printed for *Roger Iackson.* 1623.

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The Contents of the following Page.

MVSEVM BRITANNICVM

CHAP. I.

I have given over many Herbs, and every tree, that [illegible] bee to you for meate.

London printed for [illegible] 1613.

THE COVNTRY HOVSWIFES GARDEN.

The Soyle.

THe soyle of an Orchard & Garden, differ onely in these three points: First, the Gardens soyle would be somewhat dryer, because herbs beeing more tender than trees, can neither abide moisture nor drought, in such excesse measure, as trees; and therefore having a dryer soyle, y remedy is easie against drought, if need be: water soundly, which may bee done with small labour, the compasse of a garden being nothing so great, as of an Orchard, and this is the cause (if they know it) that Gardiners raise their squares: but if moysture trouble you, I see no remedy without a generall danger, except in Hops, which delight much in a low and sappy earth. Dry. Hops.

Secondly, the soyle of a Garden would be plaine and leuell, at least euery square (for we suppose the square to be the fittest forme) the reason: the earth of a Garden wanting such helpes, as should stay the water, which an Orchard hath, and the roots of herbs being short, and not able to fetch their liquor from the bottome, are more annoyed by drought, and the Soyle being mellow and loose, is soone either washt away, or sends out his heart by too much drenching and washing. Plaine.

Thirdly, if a garden soyle be not cleere of weeds, and namely,

of grasse, the hearbs shall never thrive: for how should good hearbs prosper, when euill weeds were so fast: considering good hearbs are tender in respect of euill weedes: these being strengthned by nature, and the other by Art. Gardens haue small place in comparison, and therefore may the more easily be followed, at the least one halfe yeere before, and the better dressed after it is framed. And you shall finde that cleane keeping doth not onely auoid danger of gathering weeds, but also is a speciall ornament, and leaues more plentifull sap for your tender hearbs.

CHAP. II.

Of the Site.

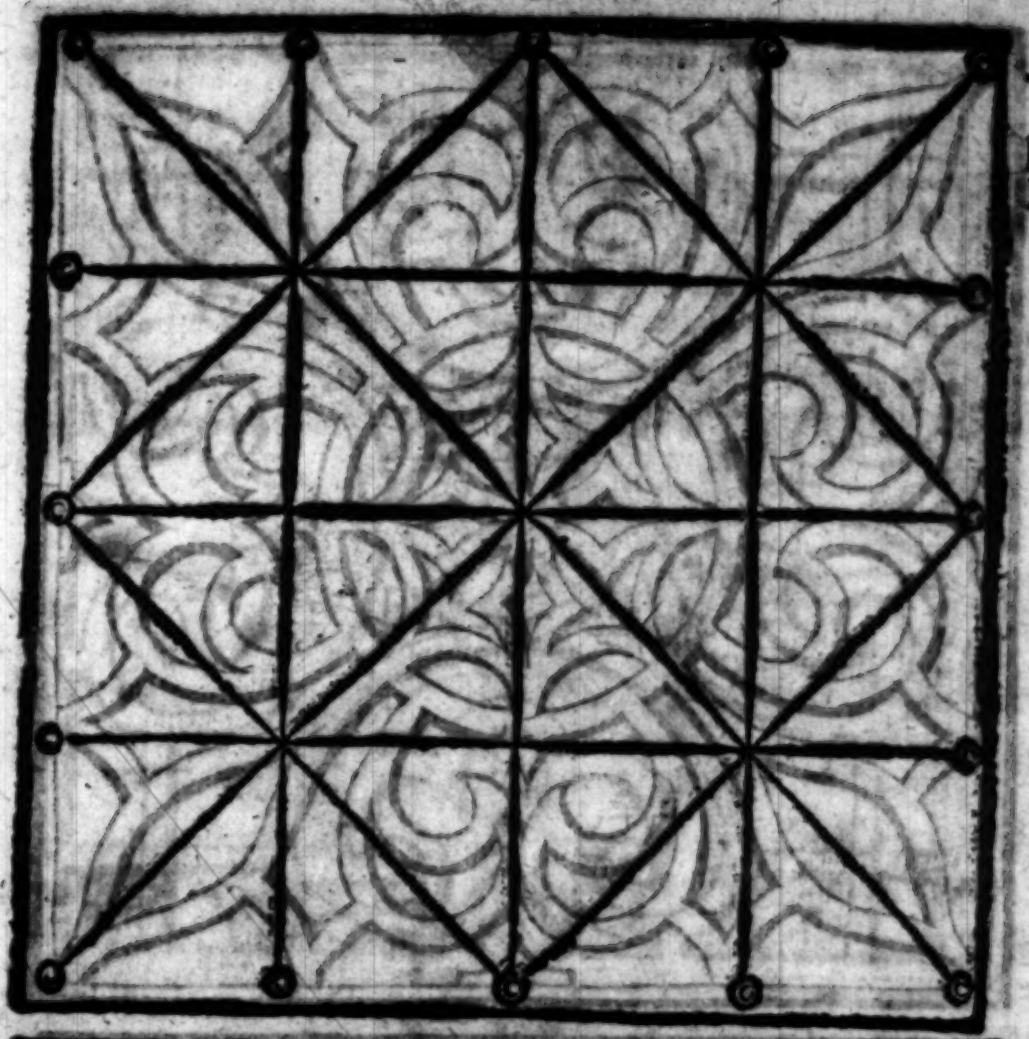
I Cannot see in any sort, how the Site of the one should not be good, and fit for the other: The ends of both being one, good, wholesome, and much fruit ioyned with delight. Saue that trees be more able to abide the nipping frosts than tender hearbs: but I am sure, the flowers of trees are as soone perished with cold, as any hearbe except Pompions, and Melons.

CHAP. III.

Of the forme.

LEt that which is said in the Orchards forme, suffice for a Garden in generall: but for spetiall formes in squares, they are as many, as there are deuices in Gardiners braines. Neither is the wit and art of a skilfull Gardiner in this point not to be commended, that can worke more variety for breeding of more delightsome choise, and of all those things, where the owner is able and desirous to be satisfied. The number of formes, Mazes and Knots is so great, and men are so diuersly delighted, that I leaue euery Housewife to her selfe, especially seeing to set downe many, had been but to fill much paper; yet lest I depriue her of all delight and direction, let her view these few, choise, new formes, and note this generally, that all plots are square, and al are bordred about with Privit, Katlins, Fearberries, Roses, Thorne, Rosemarie, Sea flowers, Hyssop, Sage, or such like.

CHAP.

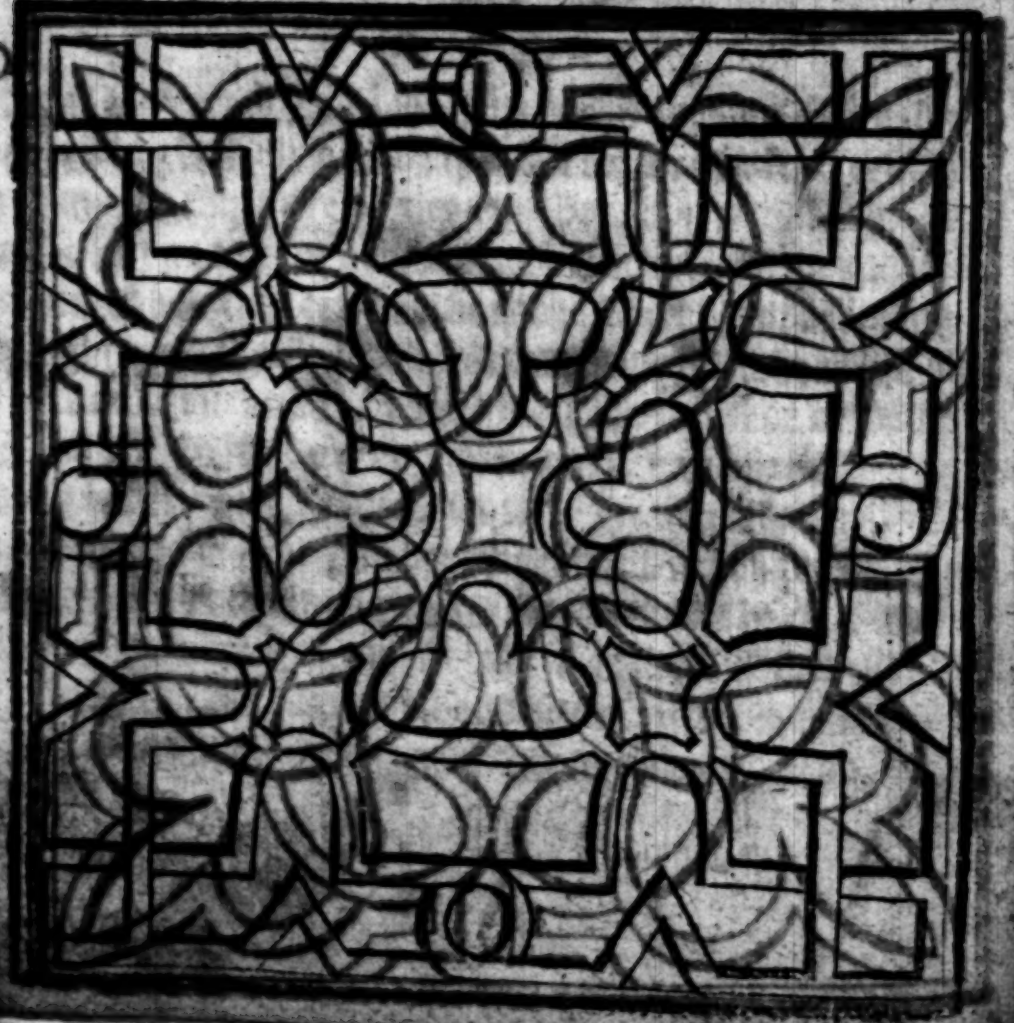


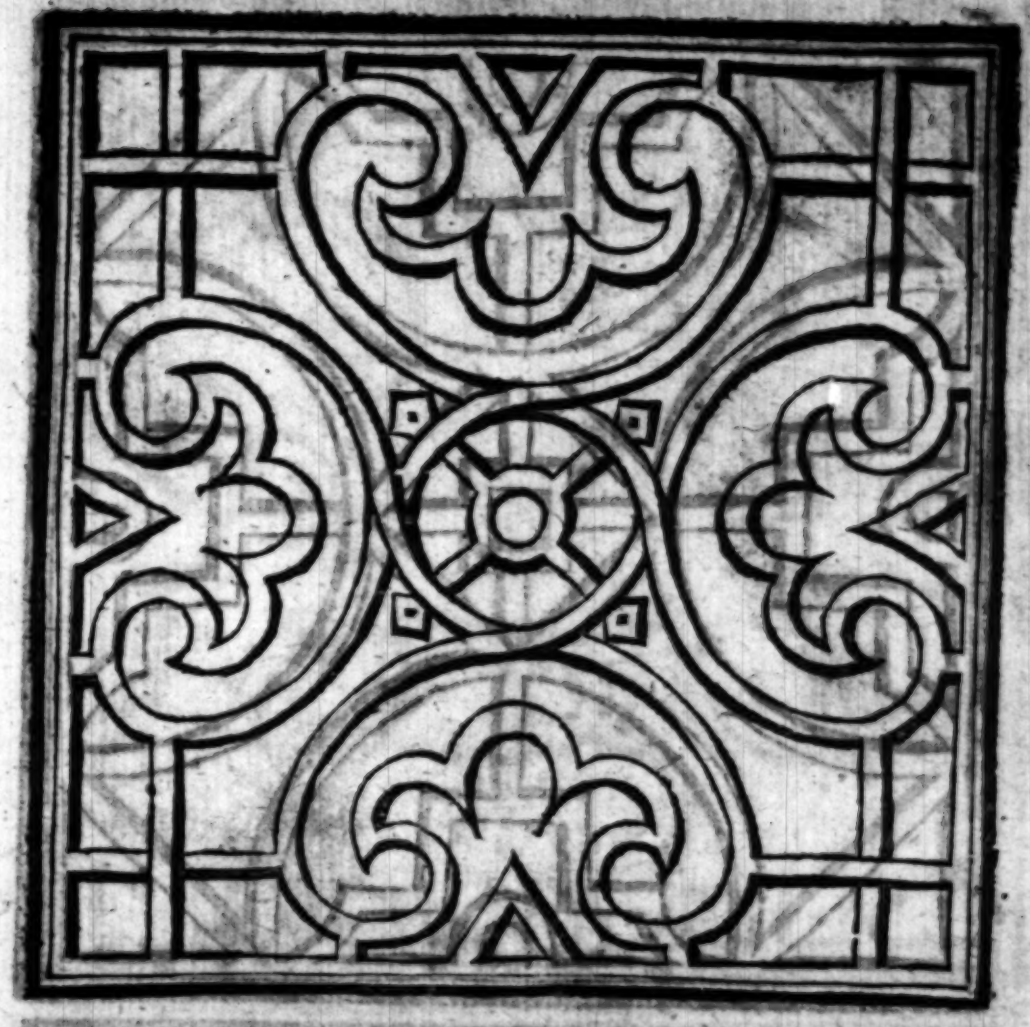
The ground plot for Knots.

Cinkfoyle.

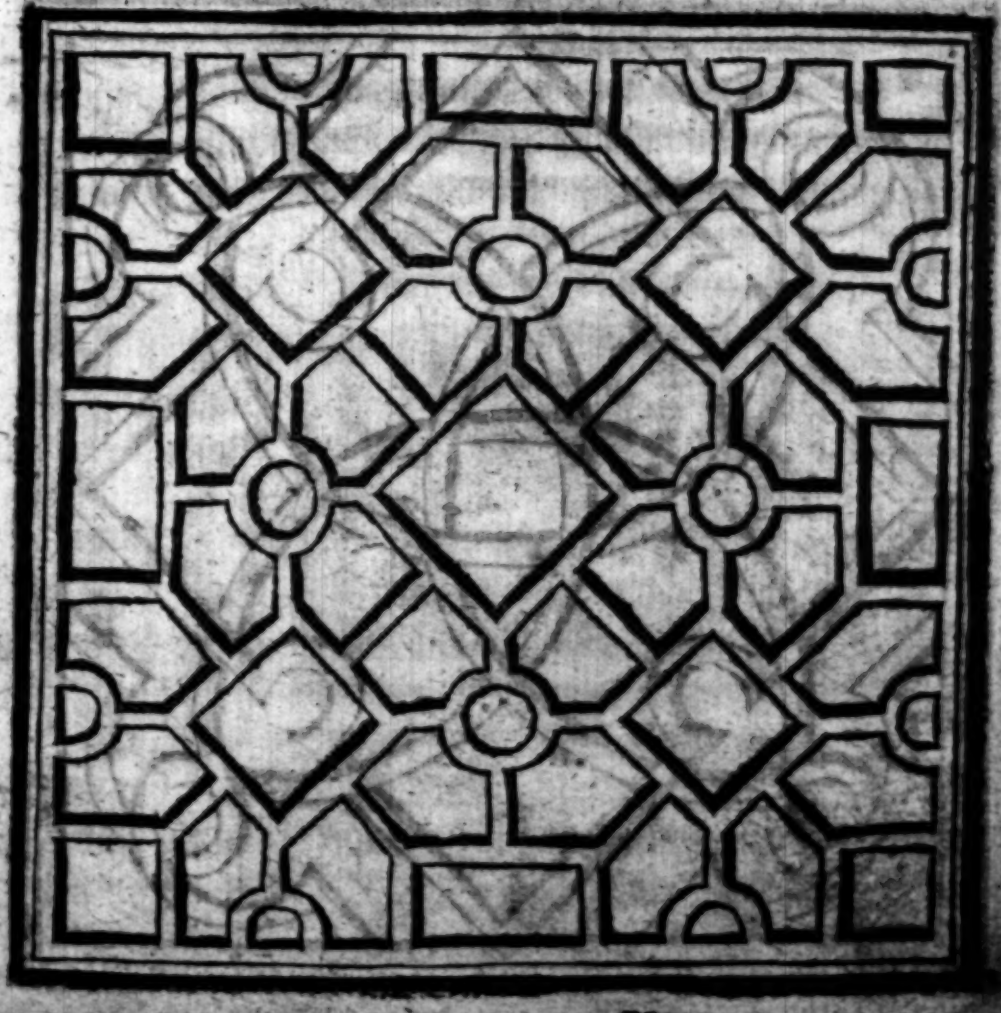
Flower-deluce.

The Tre-foyle.





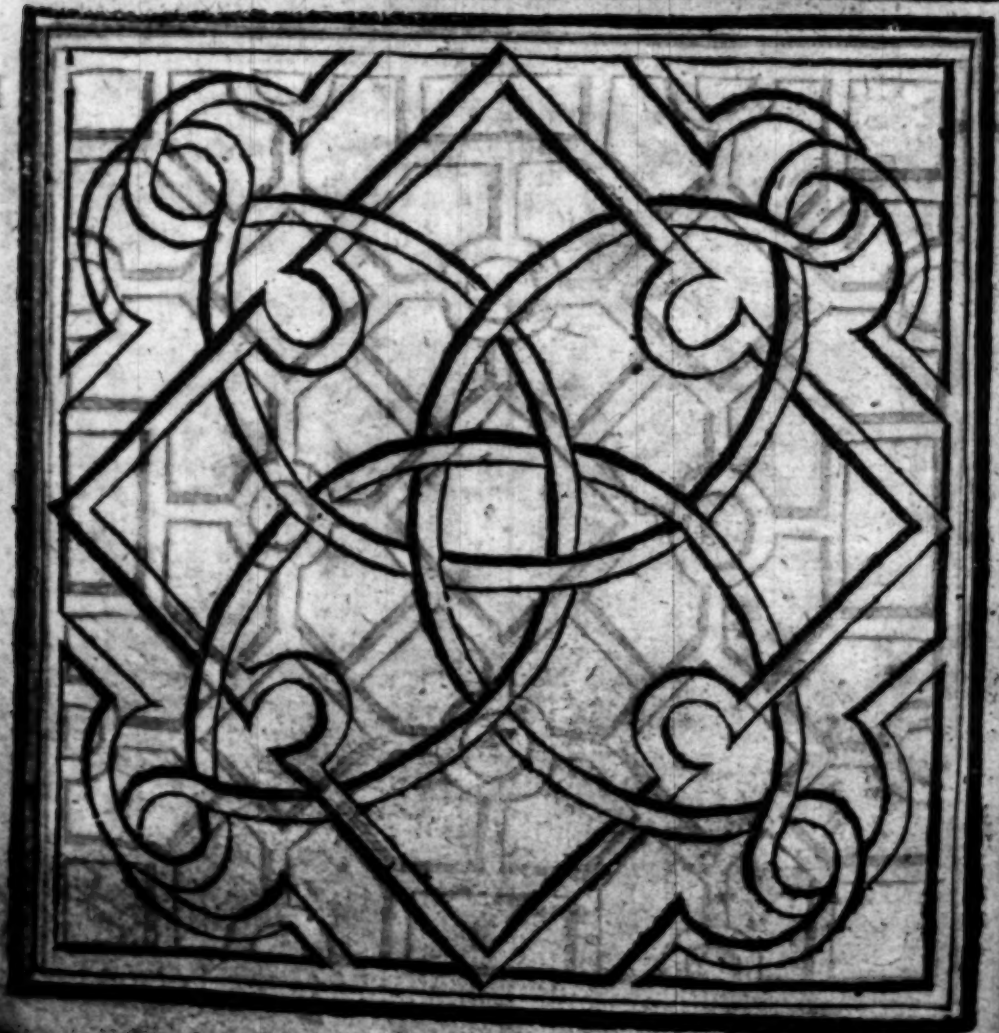
The Fret.



Lozengers.

Crosse-bowe.

Diamond.



Quall.

Maze.

Chap. IIII. *Of the Quantitie.*

A Garden requireth not so large a scope of ground as an Orchard, both in regard of the much Weeding, dressing and remouing, and also the paines in a Garden is not so well repayed home, as in an Orchard. It is to be granted, that the Kitchin garden both yeeld rich gaines by Berries, Rootes, Cabbages, &c. yet these are no way comparable to the fruits of a rich Orchard: but notwithstanding I am of opinion, that it were better for England, that we had more Orchards and Gardens, and more large. And therefore we leaue the quantitie to euery mans ability and will.

Chap. V. *Of Fence.*

Seeing we allow Gardens in Orchard plots, and the benefit of a Garden is much, they both require a strong & shrowding fence. Therefore leauing this, let vs come to the hearbs themselues, which must be the fruit of all these labours.

Chap. VI. *Of two Gardens.*

Hearbes are of two sorts, and therefore it is meete (they requiring diuers manners of Husbandry) that wee haue two Gardens: A Garden for flowres, & a Kitchen Garden: or a Summer Garden, and a Winter Garden: not that wee meane so perfect a distinction, that ỳ Garden for flowres should or can be without hearbs good for the Kitchen, or the Kitchen Garden should want flowres, nor on the contrarie: but for the most part they would be seuered: first, because your Garden flowres shall suffer some disgrace, if among them you intermingle Onions, Parsnips, &c. Secondly, your Garden that is durable, must be of one forme: but that, which is for your Kitchens vse, must yeeld daily rootes, or other hearbes, and suffer deformitie. Thirdly, the hearbes of both will not be both alike redy, at one time, eyther for gathering, or remouing. First therefore

Of the Summer Garden.

These hearbes & flowres are comely & durable for squares and knots, and all to be set at Michael-tide, or somewhat before,

before, that they may be settled in, and taken with the ground, before Winter, though they may bee set, especially sowne in the Spring.

Roses of all sorts (spoken of in the Orchard,) must bee set. Some vse to set slippes and twine them, which sometimes, but seldome thriue all.

Rosemary, Lauender, Bee-flowers, Isop, Sage, Time, Cowslips, Pyony, Walles, Cloue Gilliflowers, Pinkes, Southernwood, Lillies, of all which hereafter.

Of the Kitchen Garden.

THough your Garden for flowers doth in a sort peculiarly challenge to it selfe a profit, and exquisite forme to the eyes, yet you may not altogether neglect this, where your hearbs for the pot doe grow. And therefore, some here make comely borders with ỹ Hearbs aforesaid. The rather because abundance of Roses and Lauender yeeld much profite, and comfort to the sences: Rosewater and Lauender, the one cordiall (as also the Violets, Burrage, & Buglas) the other reuiuing the spirits by the sence of smelling: both most durable for smell, both in flowres and water: you need not here raise your beds, as in the other Garden, because Summer towards, will not let too much wet annoy you. And these hearbs require more moisture: yet must you haue your beds diuided, that you may go betwixt to weede, & somewhat forme would be expected: To which it auaileth, that you place your hearbs of biggest growth, by walles, or in borders, as Fenell, &c. and the lowest in the middest, as Saffron, Strawberries, Onions, &c.

Chap. VII.

Diuision of hearbs.

GArden hearbs are innumerable, yet these are common and sufficient for our Country Housewiues.

Hearbs of greatest growth.

Fenell, Angelica, Tansie, Hollyhock, Lonage, Ely Cãpane, French Mallowes, Lylies, French Poppie, Endiue, Succory, and Clarie.

Hearbs of middle growth.

Burrage, Buglas, Parslie, sweet Sicilye, Flower deluce, Stocke Gillyflowers, Wall-flowers, Annisseeds, Coriander, Feather-fewell, Marigolds, Herbus Christi, Langdebeefe, Alexanders, Carduus Benedictus.

Hearbs of smallest growth.

Pansye, or Harts ease, Coast Margerum, Sauery, Strawberies, Saffron, Lyriopas, Daffadowndillies, Leekes, Chiues, Chibals, Skerots, Onions, Batchelors buttons, Dasies, Penyryall.

Hitherto I haue onely reckoned vp, & put in this rank, some hearbs. Their husbandry follow each in an Alphabeticall order, the better to be found.

Chap. VIII.

Husbandry of Hearbs.

ALexanders are to be renued as Angelica. It is a timely Pot-hearbe.

Angelica is renued with his seede, whereof he beareth plentie the second yeere, and so dyeth. You may remoue the roots the first yeere. The leaues distilled, yeeld water soueraigne to expell paine from the stomacke. The roote dryed taken in the fall, stoppeth the poares against infections.

Annyseedes make their growth, and beareth seedes the first yeere, & dyeth as Coriander: it is good for opening the pipes, and it is vsed in Comfits.

Artichoakes are renued by dyuiding the roots into sets, in March, euery third or fourth yeere. They require a seuerall vsage, and therefore a seuerall whole plot by themselues, especially considering they are plentifull of fruite much desired.

Burrage & Buglas, two cordials, renue themselues by seede yeerely, which is hard to be gathered: they are exceeding good Pot-hearbs, good for Bees, and most comfortable for the heart and stomack, as Quinches and Wardens.

Camomile, set rootes in bankes and walkes. It is sweet smelling, quallifying headache.

Cabbages require great rome, they seede the second yeere: sowe them in February, remoue them when the plants are an handfull long, set deepe and wet. Looke well in drought for the white

white Caterpillers wozme, she spaunes vnder the leafe closely: for euery liuing Creature doth seek food and quiet shelter, and growing quicke, they drawe to, and eate the hearte: you may find them in a rainie or dewie morning. It is a good Potherbe, and of this Herb called Cole, our Country Housewiues giue their pottage their name, and call them Caell.

Carduus Benedictus, or blessed thistle, seeds and dyes the first yeere, the excellent vertue thereof I referre to Herbals: for we are Gardiners, not Physicians.

Carrets are sowne late in Aprill or May, as Turneps, else they seede the first yeere, and then their roots are naught: the second yeere they dye, their rootes grow great, and require large roome.

Chibals or Chiues haue their rootes parted, as Garlick, Lillies, &c. and so are they set euery third or fourth yeere: a good pot-hearbe opening, but euill for the eyes.

Clarie is sowne, it seeds the second yeere, and dyes. It is somwhat harsh in taste, a little in pottage is good, it strengthe-neth the reines.

Coast, Rootes parted make sets in March: it beares the second yeere: it is vsed in Ale in May.

Coriander is for vsage and vse, much like Anniseeds.

Daffadowndillies haue their rootes parted, and set once in three or foure yeere, or longer time. They flower timely, and after Midsummer, are scarcely seene. They are more for ornament, than vse, so are Daisies.

Daisye rootes parted and set, as Flower-deluce and Camomile, when you see them grow too thicke or decay. They be good to keepe vp, and strengthen the edges of your borders, as Pinkes, they be red, white, mixt.

Ellycampane root is long lasting, as is the Louage, it seeds yeerely, you may diuide the root, and set the root, taken in Winter it is good (being dryed, powdered and drunke) to kill itches.

Endiue and Succory are much like in nature, shape, and vse, they renue themselues by seed, as Fennell, and many other hearbs. You may remoue them before they put forth Shanks, a good Potherbe.

Fennell is renued either by the seeds (which it beareth the

second yeere, and so yeerely in great abundance) sowne in the fall or Spring, or by diuiding one root into many sets, as Artichoke, it is long of growth and life. You may remoue the root vnshankt. It is exceeding good for the eyes, distilled, or any otherwise taken: it is vsed in dressing Hiues for swarmes, a very good Potherbe, or for Sallets.

Fetherfewle shakes seed. Good against a shaking Feuer, taken in a posset drinke fasting.

Flower-deluce, long lasting. Diuide his roots, and set: the rootes dryed haue a sweet smell.

Garlicke may be set an handfull distance, two inches deepe, in the edge of your beds. Part the heads into seuerall cloues, and euery cloue set in the hinder end of February, will increase to a great head before September: good for opening, euill for eyes: when the blade is long, fast two and two together, the heads will be bigger.

Hollyhocke riseth high, seedeth and dyeth: the chiefe vse I know is ornament.

Hsop is reasonable long lasting: young rootes are good to set, slips better. A good Potherbe.

Iuly-flowers, commonly called Gilly-flowers; or Cloue-Iuly-flowers (I call them so, because they flowre in July) they haue the name of Cloues, of their sent. I may well call them the King of Flowres (except the Rose) & the best sort of them, are called Queene-Iuly-flowres. I haue of them nine or ten seuerall colours, and diuers of them as bigge as Roses: of all flowres (saue the Damaske Rose) they are the most pleasant to sight and smell: they last not past three or foure yeeres vnremoued. Take the slips (without shankes) and set any time, saue in extreme frost, but especially at Michael tide. Their vse is much in ornament, and comforting the spirits, by the sence of smelling.

Iuly-flowres of the Wall, or Wall Iuly-flowres, Wall-flowres, or Bee-flowres, or Winter Iuly-flowres, because growing in walles, euen in Winter, and good for Bees, will grow euen in stone walles, they will seeme dead in Summer, and yet reuiue in Winter. They yeeld seed plentifully, which you may sow at any time, or in any broken earth, especially on the top of a mudde wall, but moyst, you may set the root before

it

it be branch't, euery slip that is not flowr'd, will take root, or crop him in Summer, and he will flower in Winter: but his winter seed is vntimely. This and Palmes are exceeding good, and timely for Bees.

Leekes yeeld seed the second yeere, vnremoued and die, vnlesse you remoue them; vsuall to eate with salt and bread, as Onyons alwayes greene, good Pothearbe, euill for the eyes.

Lauender Spike would be remoued within seuen yeeres, or eight at the most. Slips twined as Isop and Sage, would take best at Michael tyde. This flower is good for Bees, most comfortable for smelling, except Roses: and kept dry, is as strong after a yeere, as when it is gathered. The water of this is comfortable.

White Lauender would be remoued sooner.

Lettice yeelds seed the first yeere, and dyes: sow betime, and if you would haue them Cabbage for Sallets, remoue them as you doe Cabbage. They are vsuall in Sallets, and the pot.

Lillies white and red, remoued once in three or foure yéeres their rootes yeeld many Sets, like the Garlicke. Michael tide is the best: they grow high, after they get roote: these rootes are good to breake a Byle, as are Mallowes and Sorrell.

Mallowes French, or gagged, the first or second yeere, seed plentifully: sow in March, or before, they are good for the housewifes pot, or to breake a bunch.

Marigolds most commonly come of seed, you may remoue the Plants, when they be two inches long. The double Marigold, being as bigge as a little Rose, is good for shew. They are a good Pothearbe.

Oculus Christi, or Christs eye, seeds and dyes the first or second yeere: you may remoue the yong Plants, but seed is better: one of these seeds put into the eye, within three or foure houres will gather a thicke skinne, cleere the eye, and bolt it selfe forth without hurt to the eye. A good Pot hearbe.

Onyons are sowne in Februarie, they are gathered at Michael tide, and all the Summer long, for Sallets; as also yong Parsly, Sage, Chibals, Lettice, sweet Sicilly, Fennell, &c. good alone, or with meate as Mutton, &c. for sauce, especially for the pot.

Parsly sow the first yeere, and vse the next yeere: it seedes

plentifully, an herbe of much vse, as sweet Sicily is. The seed and roots are good against the Stone.

Parsneps require an whole plot, they be plentifull and common: sow them in Februarie, the Kings (that is in the middle) seed broadest and reddest. Parsneps are sustenance for a strong stomake, not good for euill eyes: When they couer the earth in a drought, to tread the tops, make the rootes bigger.

Peny-royall, or Pudding Grasse, creepes along the ground, like ground Iuie. It lasts long, like Daisies, because it puts and spreads dayly new rootes. Diuide and remoue the rootes, it hath a pleasant taste and smell, good for the pot, or hackt meate, or Haggas Pudding.

Pumpions: Set seeds with your finger, a finger deepe, late in March, and so soon as they appeare, euery night if you doubt frost, couer them, and water them continually out of a water-pot: they be very tender, their fruit is great and watrish.

French Poppy beareth a faire flower, and the Seed will make you sleepe.

Raddish is sauce for cloyed stomacks, as Capers, Oliues, and Cucumbers, call the seedes all Summer long here and there, and you shall haue them alwaies yong and fresh.

Rosemary, the grace of Herbs in England, in other Countries common. To set slips immediately after Lammas, is the surest way. Seede sowne may proue well, so they be sowne in hot weather, somewhat moist, and good earth: for the Herbe, though great, is nesh and tender (as I take it) brought from hote Countries to vs in the cold North: set thinne. It becomes a Window well. The vse is much in meats, more in Physick, most for Bees.

Rue, or Herbe of Grace, continually greene, the slips are set. It lasts long as Rosemary, Sothernwood, &c. too strong for mine Housewifes pot, vnlesse she will brue Ale therewith, against the Plague: let him not seede, if you will haue him last.

Saffron, euery third yeere his rootes would be remoued at Mid-Summer: for when all other herbs grow most, it dyeth. It floweth at Michael tide, and groweth all Winter: keepe his flowers from birds in the morning, and gather the yellow (for they shape much like Lillies) dry, and after dry them:

they

they be precious, expelling diseases from the heart & stomacke.

Sauery seeds and dyes the first yeere, good for my Huswifes pot and pye.

Sage: set slips in May, and they grow aye: Let it not seed, it will last the longer. The vse is much and common. The Monkish Prouerbe is tritum:

Cur moritur homo, cum saluia crescit in horto?

Sperous. The roots are set when they be parted, as Pyonie, and Flower-deluce at Michael-tide: the root is but small and very sweet. I know none other speciall vse but the Table.

Sweet Sicily, long lasting, pleasantly tasting, either the seed sowne, or the root parted and removed, makes increase, it is of like vse with Parsly.

Strawberries long lasting, set rootes at Michael-tide, or the spring, they be red, white and greene, and ripe, when they bee great and soft, some by Mid-summer with vs. The vse is: they will coole my Housewife well, if they bee put in Wine or Creame with Sugar.

Time, both seeds, slips and rootes are good. If it seed not, it will last three or foure yeeres or more, it smelleth comfortably. It hath much vse: namely, in al cold meats, it is good for Bees.

Turnep is sowne. In the second yeere they beare plenty of seede: they require the same time of sowing that Carrets doe: they are sick of the same disease that Cabbages be. The roote increaseth much, it is most wholesome, if it be sowne in a good and well tempered earth: Soueraigne for eyes and Bees.

I reckon these hearbs onely, because I teach my Countrey Housewife, not skilfull Artists, and it should be an endlesse labour, and would make the matter tedious to reckon vp, Landi-beefe, Stocke-Iuly-flowers, Charuall, Valerian, Go-to-bed-at-noone, Piony, Licoras, Tansie, Garden-mints, Germander, Centaurie, and a thousand such physicke Hearbs. Let her first grow cunning in this, and then she may inlarge her Garden, as her skill and abilitie increaseth. And to helpe her the more, I haue set her downe these obseruations.

Chap. IX.

Generall Rules in Gardening.

IN the South parts Gardening may be more timely, & more safely done, than with vs in Yorkeshire, because our ayre is not so fauourable, nor our ground so good.

2 Secondly most seeds shakt, by turning the good earth, are renued, their mother the earth keeping them in her bowels, till the Sunne their Father can reach them with his heat.

3 In setting hearbs, leaue no top more then an handfull aboue the ground, nor more than a foot vnder the earth.

4 Twine the rootes of those slippes you set, if they will abide it. Gilly-flowers are too tender.

5 Set moist, and sowe dry.

6 Set slips without shankes at any time, except at Midsummer, and in frosts.

7 Seeding spoiles the most rootes, as drawing the heart and sap from the root.

8 Gather for the pot and medicines, hearbs tender and greene, the sap being in the top, but in winter the root is best.

9 All the hearbs in the Garden for flowers, would once in seuen yeeres be renued, or soundly watred with puddle water, except Rosemarie.

10 In all your Gardens and Orchards, bankes and seates of Camomile, Peny-royall, Daisies and Violets, are seemely and comfortable.

11 These require whole plots: Artichokes, Cabbages, Turneps, Parsneps, Onyons, Carrets, and (if you will) Saffron, and Scerrits.

12 Gather all your seeds, dead, ripe, and dry.

13 Lay no dung to the rootes of your hearbs, as vsually they doe: for dung not melted is too hot, euen for trees.

14 Thin setting and sowing (so the rootes stand not past a foot distance) is profitable, for the hearbs will like the better. Greater hearbs would haue more distance.

15 Set and sow hearbs in their time of growth (except at Mid-

Midsummer, for then they are too too tender) but trees in their time of rest.

16 A good Housewife may, and will gather store of hearbs for the pot, about Lammas, and dry them, and pownd them, and in winter they will make good seruice.

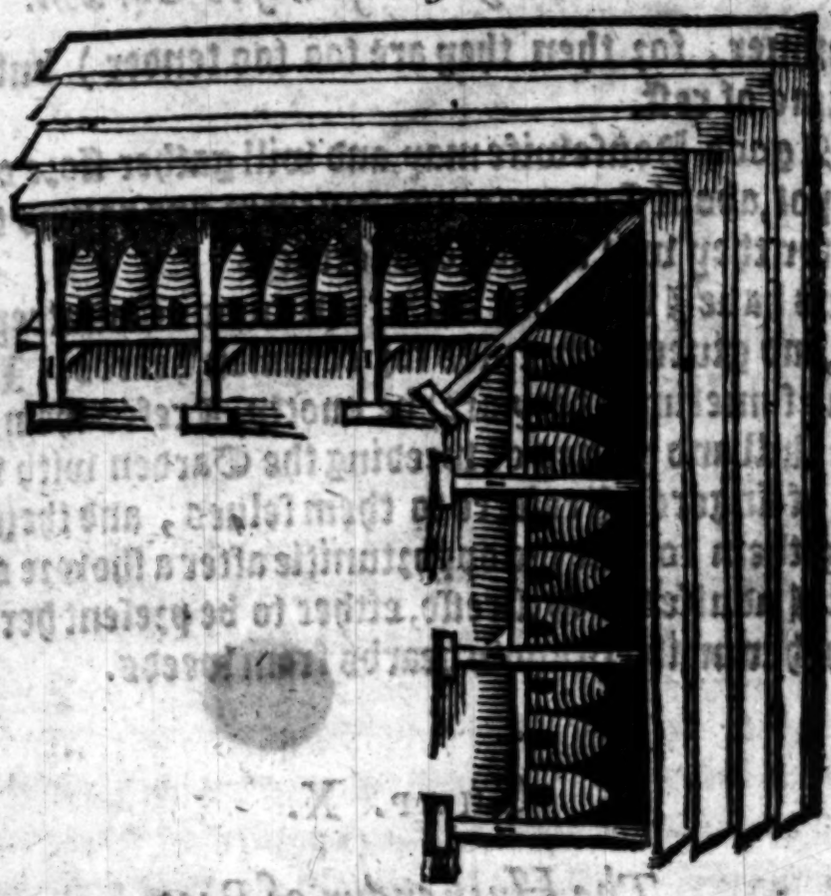
Thus haue I lined out a Garden to our Countrey Housewiues, and giuen them rules for common hearbs. If any of them (as sometimes they are) be knotty, I refer them to chap. 3. The skill and paines of weeding the Garden with weeding knives of fingers, I referre to them selues, and their maids, willing them to take the opportunitie after a showre of raine: withall I aduise the Mistresse, either to be present her selfe, or to teach her maids to know hearbs from weeds. Weeding. A good note.

Chap. X.

The Husbandry of Bees.

THere remaineth one necessarie thing to bee prescribed, which in mine opinion makes as much for ornament as either Flowers, or fome, or cleanlinesse, and I am sure as commodious as any of, or all the rest: which is Bees, well ordered. And I will not account her any of my good Housewiues, that wanteth either Bees or skilfulnesse about them. And though I know some haue written well and truely, and others more plentifully vpon this Theame: yet somewhat haue I learned by experience (being a Bee-master my selfe) which hitherto I cannot finde pat into writing, for which I thinke our Housewifes will count themselues beholding vnto me.

The first thing that a Gardiner about Bees must be carefull for, is an house not stakes and stones abroad, Sub dio: for stakes rot and reele, raine and weather eate your hiues, and couers, and cold most of all is hurtfull for your Bees. Therefore you must haue an house made along, a sure dry wall in your Garden, neere, or in your Orchard: for Bees loue Flowers and wood with their hearts. Beehouse.



This is the forme, a frame standing on posts with a Flore (if you would haue it hold more Hiues, two floores boorded) laid on Bearers, and backe posts, couered ouer with boords, slate-wise. Let the floores be without holes or clifts, lest in casting time, the Bees lye out, and loyter. And though your Hiues stand within an hand-breadth the one of another: yet will Bees know their owne home. In this frame may your Bees stand dry and warme, especially if you make doores like dores of windowes to shrowd them in Winter, as in an house: prouided you leaue the Hiues mouthes open. I my selfe haue deuised such an house, and I finde that it keepes and strengthens my Bees much, and my Hiues will last fiue to one.

Hiues. M. Markam commends Hiues of wood. I discommend them not: but straw Hiues are in vse with vs, and I thinke with all the world, which I commend for nimblenes, closenesse, warmnesse and drinesse. Bees loue no externall motions of dawbing or such like. Sometimes occasion shall bee offered to lift and turne Hiues, as shall appeare hereafter. One light entire hiue of straw in that case is better, than one that is dawbed, weighty and cumbersome. I wish euery hiue, for a keeping swarme, to hold three pecks at least in measure. For too little Hiues pro-

cure

cure Bees, in casting time, either to lye out, and loyter, or else to cast before they bee ripe and strong, and so make weake swarmes and vntimely: Whereas if they haue roome sufficient, they ripen timely, and casting seasonably, are strong, and fit for labour presently. Neither would the hiue be too too great, for then they loyter, and waste meat and time.

Your Bees delight in wood, for feeding, especially for casting: therefore want not an Orchard. A Mayes swarme is worth a Mares Foale: if they want wood, they be in danger of flying away. Any time before Midsummer is good, for casting and timely before Iuly is not euill. I much like M. Markams opinion for hiuing a swarme in combes of a dead or forsaken hiue, so they be fresh and cleanly. To thinke that a swarme of your owne, or others, will of it self come into such an hiue, is a meere conceit, Experto crede Roberto. His smearing with honey, is to no purpose, for the other Bees will eate it vp. If your swarme knit in the top of a tree, as they will, if the winde beate them not to fall downe: let the stoole or ladder described in the Orchard, doe you seruice. Hiuing of Bees.

The lesse your Spelkes are, the lesse is the waste of your honey, and the more easily will they draw, when you take your Bees. Foure Spelkes athwart, and one top Spelke are sufficient. The Bees will fasten their Combes to the Hiue. A little honey is good: but if you want, Fennell will serue to rub your Hiue withall. The Hiue being drest and ready spelkt, rubd and the hole made for their passage (I vse no hole in the Hiue, but a piece of wood hoal'd, to saue the hiue and keep out Mice) shake in your Bees, or the most of them (for all commonly you cannot get) the remainder will follow. Many vse smoke, Nettles, &c. which I vtterly dislike: for Bees loue not to bee molested. Ringing in time of casting is a meere fancie, violent handling of them is simply euill, because Bees of all other creatures, loue cleanlinesse and peace. Therefore handle them leasurely and quietly, and their Keeper whom they know, may doe with them, what he will, without hurt: Being hiued at night, bring them to their seat. Set your Hiues all of one yéere together. Spelkes.

Signes of breeding, if they be strong.

1. They will auoid dead yong Bees and Drones.

2. They

2 They will sweat in the morning, till it runne from them; alwaies when they be strong.

Signes of casting.

1 They will flye Drones, by reason of heat.

2 The yong swarme will once or twice in some faire season, come forth mustering, as though they would cast, to proue themselues, and goe in againe.

3 The night before they cast, if you lay your eare to the Hiues mouth, you shall heare two or three, but especially one aboue the rest, cry, Up, vp, vp; or, Toit, tout, tout, like a trumpet, sounding the alarum to the battell.

Much descanting there is, of, and about the Master-bee, and their degrees, orders, and gouernment: but the truth in this point is rather imagined, then demonstrated. There are some coniectures of it, viz. we see in the Combes diuers greater houses than the rest, and we heare commonly the night before they cast, sometimes one Bee, sometimes two, or more Bees, giue a lowd and seuerall sound from the rest, and sometimes Bees of greater bodies than the common sort: but what of all this? I leane not on coniectures, but loue to set downe that I know to be true, and leaue these things to them that loue to diuine. Keepe none weake, for it is hazard, oftentimes with losse: Feeding will not helpe them: for being weake, they cannot come downe to meat, or if they come downe, they dye, because Bees weake cannot abide cold. If none of these, yet will the other Bees being strong, smell the honey, and come and spoile, and kill them. Some helpe is in casting time, to put two weake swarmes together, or as M. Markam well saith: Let them not cast late, by raising them with wood or stone: but with imps (say I.) An impe is three or foure wreathes, wrought as the hiue, the same compasse, to raise the hiue withall: but by Catching. erperience in tryall, I haue found out a better way by Clustering, for late or weake swarmes hitherto not found out of any Clustering. that I know. That is this: After casting time, if I haue any stocke proud, and hindered from timely casting, with former Winters pouertie, or euill weather in casting time, with two handles & crookes, fitted for the purpose, I turne vp that stock so pestred with Bees, and set it on the crowne, vpon which so turned with the mouth vpward, I place another empty

hiue

hiue well dreſt, and ſpelkt, into which without any labour, the Swarme that would not depart, and caſt, will preſently aſcend, becauſe the old Bees haue this qualitie (as all other breeding creatures haue) to expell the young, when they haue brought them vp. There will the ſwarme build as kindely, as if they had of themſelues been caſt. But bee ſure you lay betwixt the hiues ſome ſtraight and cleanely ſticke or ſtickes, or rather a boord with holes, to keepe them aſunder: otherwiſe they will ioyne their workes together ſo faſt, that they cannot be parted. If you ſo keepe them aſunder at Michael-tide, if you like the weight of your ſwarme (for the goodneſſe of ſwarmes is tried by weight) ſo catched, you may ſet it by for a ſtocke to keepe. Take heed in any caſe the combes be not broken, for then the other Bees will ſmell the honey, and ſpoyle them. This haue I tryed to be very profitable for the ſaſing of Bees. The Inſtrument hath this forme. The great ſtraight peece is wood, the reſt are iron claſpes and nayles, the claſpes are looſe in the ſtapes: Two men with two of theſe faſtened to the hiue, will eaſily turne it vp.

They gather not till Iuly; for then they be diſcharged of their young, or elſe they are become now ſtrong to labour, and now ſap in flowers is ſtrong and proud: by reaſon of time, and force of Sunne. And now alſo in the North (and not before) the hearbs of greateſt vigour put their Flowers; As Beanes, Fennell, Burrage, Rape, &c.

The moſt ſeaſonable weather for them, is heat, & drought, becauſe the neſh Bee can neither abide cold or wet: and ſhowres (which they well fore-ſee) doe interrupt their labours, vnleſſe they fall on the night, and ſo they further them.

After caſting time, you ſhall benefit your ſtocks much, if you helpe them to kill their Droanes, which by all probabilitie and iudgement, are an idle kinde of Bees, and waſtefull. Some ſay they breed and haue ſeen yong Droanes in taking their honey, which I know is true. But I am of opinion, that there are alſo Bees which haue loſt their ſtings, and ſo being, as it were gelded, become idle and great. There is great vſe Droanes.

of them: Deus, et natura nihil fecit frustra. They heate the bees, and cause them cast the sooner. They neuer come soorth but when they be ouer heated. They neuer come home loaden. After casting time, and when the Bées want meat, you shall see the labouring Bées fasten on them, two, three, or foure at once, as if they were thieues to be led to the gallowes, and killing them, they cast out, and drawe them farre from home, as hatefull enemies. Our Housewife, if she be the Keeper of her owne bées (as she had néed to be) may with her bare hand in ỹ heate of the day, safely destroy them in the hiues mouth. Some vse towards night, in a hot day, to set before the mouth of the hiue a thin boord, with little holes, in at which the lesser bees may enter, but not the droanes, so that you may kill them at your pleasure.

Annoyances. Snayles spoile them by night like theeues: they come so quietly, and are so fast, that the Bées feare them not. Looke early and late, especially in a rainie or dewey euening or morning.

Mice are no lesse hurtfull, and the rather to hiues of straw: and therefore couerings of straw draw them. They will in eyther at the mouth, or sheere themselues an hole. The remedie is good Cats, Rats-bane and watching.

The cleanly Bée hateth the smoake as poison, therefore let your Bées stand neerer your garden, than your Brew-house or Kitchen.

They say Sparrowes & Swallowes are enemies to Bées, but I see it not.

More hiues perish by winters cold, than by all other hurts: For the bée is tender and nice, and onely liues in warme weather, and dyes in cold: And therefore let my Housewife be perswaded, that a warme dry house before described, is the chiefest help she can make her bées against this, and many more mischieues. Many vse against cold in Winter, to stop vp their hiue close, and some set them in houses, perswading thẽselues, that thereby they relieue their bees. First, rolling and mouing is hurtfull. Secondly, in houses, going, knocking, & shaking is noysome. Thirdly, too much heate in an house is vnnaturall for them: but lastly, and especially, Bées cannot abide to be stopt close vp. For at euery warme season of the sun they re-

uiue,

nine, and lining eate, and eating must needs purge abroad, (in her house) the cleanly Bee will not purge her selfe. Iudge you what it is for any liuing creature, not to disburden nature. Being shut vp in calme seasons, lay your eare to the hiue, and you shall heare them yarme and yell, as so many hungred prisoners. Therefore impound not your Bees, so profitable and free a creature.

Let none stand aboue three yeeres, else the combes will be blacke and knotty, your honey will be thin and vncleanly: and if any cast after three yeeres, it is such as haue swarmes, and old Bees kept all together, which is great losse. Smoaking with ragges, rozin, or brimstone, many vse: some vse drowning in a tub of cleane water, & the water well brewde, will be good botchet. Draw out your spelkes immediately with a paire of pinchars, lest the wood grow soft and swell, & so will not be drawne, then must you cut your hiue. Taking of Bees.

Let no fire come neere your hony, for fire softeneth the wax and drosse, and makes them runne with the hony. Fire softeneth, weakeneth, and hindereth hony for purging. Breake your Combes small (when the dead empty combes are parted from the loaden combes into a Siue, borne ouer a great boiwle, or bessell, with two staues, and so let it runne two or three dayes. The sooner you tunne it vp, the better will it purge. Runne your swarme honey by it selfe, and that shall be your best. The elder your Hiues are, the worse is your honey. Srayning honey.

Vsuall vessels are of clay, but after wood be satiated with Honey (for it will leake at first: for Honey is maruellously searching, the thicke, and therefore vertuous) I vse it rather because it will not breake so soone, with falls, frosts, or otherwise, and greater vessels of clay will hardly lack. Vessels.

When you vse your honey, with a spoone take off the skin which it hath put vp.

And it is worth the regard, that Bees thus vsed, if you haue but forty stocks, shall yeeld you more cõmodity clearely than forty acres of good ground. And thus much may suffice, to make good Housewiues loue and haue good Gardens and Bees.

FINIS. Deo laus.

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A MOST PROFITABLE new Treatise, from approued experience of the Art of propagating Plants : by *Simon Harward.*

Chap. I.

The Art of propagating Plants.

There are foure sorts of Planting, or propagating, as in laying of shootes or little branches, whiles they are yet tender in some pit made at their foote, as shall bee said hereafter, or vpon a little ladder or Basket of Earth tyed to the bottome of the branch, or in boaring a Willow thorow, and putting the branch of the Tree into the hole, as shall be fully declared in the Chapter of Grafting. There are likewise seasons to propagate in; but the best is in the Spring, and March, when the Trees are in the Flower, and doe begin to grow lusty. The young planted Siens or little Grafts must be propagated in the beginning of Winter, a foot deepe in the earth, and good manure mingled amongst the earth; which you shall cast forth of the pit, wherein you meane to propagate it, to tumble it in vpon it againe. In like manner your superfluous Siens, or little Plants must be cut close by the earth, when as they grow about some small Impe, which we meane to propagate, for they would doe nothing but rot. For to propagate, you must digge the earth round about the tree, that so your rootes may be laid in a man-

ner halfe bare. Afterward draw into length the pit on that syde where you meane to propagate, and according as you perceiue that the rootes will be best able to yeeld, and be gouerned in
2. the same pit, to vse them, and that with all gentlenesse, and stop close your Siens, in such sort, as that the wreath which is in the place where it is grafted, may bee a little lower then the Siens of the new Wood, growing out of the earth, euen so high as it possible may be. If the trees that you would propagate be somewhat thicke, and thereby the harder to ply, and somewhat stiffe to lay in the pit: then you may wet the stocke almost to the midst, betwixt the root and the wreathing place, and so with gentle handling of it, bow downe into the pit the wood which the grafts haue put forth, and that in as round a compasse as you can, keeping you from breaking of it: afterward lay ouer the cut, with gummed Waxe, or with grauell and sand.

Chap. II.

Grafting in the Barke.

Grafting in the Barke, is vsed from mid-August, to the beginning of Winter, and also when the Westerne winde beginneth to blow, being from the 7. of February, vnto the 11. of June. But there must care bee had, not to graffe in the barke in any rainy season, because it would wash away the matter of ioyning the one and the other together, and so hinder it.

Grafting in the budde, is vsed in the Summer time, from the end of May, vntill August, as being the time when the trees are strong and lusty, and full of sap and leaues. To wit, in a hot Countrey, from the midst of June, vnto the midst of
13. July: but cold Countries, to the midst of August, after some small showres of Raine.

If the Summer be so exceeding dry, as that some trees doe withhold their sap, you must wait the time till it do returne.

Graft from the full of the Moone, vntill the end of the old.

You may graft in a Cleft, without hauing regard to the Raine, for the sap will keepe it off.

You may graft from mid-August, to the beginning of November: Cowes dung with straw doth mightily preserue the graft.

At

It is better to graft in the euening, then the morning.

The furniture and tooles of a Grafter, are a Basket to lay his Grafts in, Clay, Grauell, Sand, or strong Earth, to draw ouer the plants clouen: Mosse, Woollen clothes, barkes of Willow to ioyne to the late things & earth be fore spoken, and to keepe them fast: Oziers to tye againe vpon ẏ barke, to keepe them firme and fast: Summed Wax, to dresse and couer the ends and tops of the grafts newly cut, that so the raine and cold may not hurt them, neither yet the sap rising from belowe, be constrained to returne againe vnto the shootes. A little Sawe or hand-Sawe, to sawe off the stocke of the plants, a little Knife or Pen-knife to graffe, and to cut and sharpen the grafts, that so the barke may not pill nor be broken; which often cõmeth to passe when the graft is full of sap. You shall cut the graffe so long, as that it may fill the cliffe of the plant, and therewithall it must be left thicker on the barke side, that so it may fill vp both the cliffe and other incisions, as any need is to be made, which must be alwaies well ground, well burnished without all rust. Two wedges, the one broad for thicke trees, the other narrow for lesse and tender trees, both of them of box, or some other hard and smooth wood, or steele, or of very hard iron, that so they may need lesse labour in making them sharpe.

A little hand-Bill to set the plants at more libertie, by cutting off superfluous boughs, helu'd of Iuory, Box, or Brazell.

Chap. III.

Grafting in the cleft.

The manner of grafting in a cleft, to wit, the stock being clou'd, is proper not onely to trees, which are as great as a mans legges or armes, but also to greater. It is true, that in as much as the trees cannot easily be clouen in their stocke, that therefore it is expedient to make incision in some one of their branches, and not in the maine body, as wee see to bee practised in great Apple-trees, & great Peare-trees, and as we haue already declared heretofore.

To graft in the cleft, you must make choice of a graft that is full of sap and iuyce, but it must not bee, but till from after Ianuarie vntill March: And you must not thus graft in any

tree

tree that is already budded, because a great part of the iuyce & sap would be already mounted vp on high, and risen to the top, and there dispersed and scattered hither and thither, into euery sprigge and twigge, and vse nothing welcome to the graft.

6. You must likewise be resolued not to gather your graft the day you graft in, but ten or twelue dayes before: for otherwise, if you graft it new gathered, it will not bee able easily to incorporate it selfe with the body and stocke, where it shall bee grafted; because that some part of it will dry, and by this meanes will be a hinderance in the stocke to the rising vp of the sap, which it should communicate vnto the graft, for the making of it to put forth. And whereas this dried part will fall a crumbling, and breaking through his rottennesse, it will cause to remaine a concauitie, or hollow place in the Stocke, which will bee an occasion of a like inconuenience to befall the graft. Moreouer, the graft beeing new and tender, might easily be hurt of the bands, which are of necessitie to be tyed about the Stocke, to keepe the graft firme and fast. And you must further see, that your Plant was not of late remoued, but that it haue already fully taken root.

When you are minded to graft many grafts into one cleft, you must see that they be cut in the end all alike.

7. See that the grafts be of one length, or not much differing, and it is inough, that they haue three or foure eylets without the wrench when the plant is once sawed, and lopped of all his small Stems and shootes round about, as also implyed of all his branches, if it haue many: then you must leaue but two at the most, before you come to the cleauing of it: then put to your little Saw, or your knife, or other edged toole that is very sharpe, cleaue it quite through the middest, in gentle & soft sort: First, tying the Stocke very sure, that so it may not cleaue further then is need: and then put to your Wedges into the cleft, vntill such time as you haue set in your grafts, and in cleauing of it, hold the knife with the one hand, and the free with the other, to helpe to keepe it from cleauing too farre. Afterwards put in your wedge of Bore or Brazill, or bone at the small end, that so you may the better take it out againe, when you haue set in your grafts.

8. If the Stocke be clouen, or the Barke loosed too much from the

the wood: then cleaue it downe lower, and set your grafts in, and looke that their incision bee fit, and very iustly answerable to the cleft, and that the two saps, first, of the Plant and graft, be right and euen set one against the other, and so handsomely fitted, as that there may not be the least appearance of any cut or cleft. For if they doe not thus iumpe one with another, they will neuer take one with another, because they cannot worke their seeming matter, and as it were cartilaginous glue in conuenient sort or manner, to the gluing of their ioynts together. You must likewise beware, not to make your cleft ouerthwart the pitch, but somewhat aside.

The barke of your Plant beeing thicker then that of your Graft, you must set the graft so much the more outwardly in the cleft, that so the two saps may in any case bee ioyned, and set right the one with the other: but the rinde of the Plant must be somewhat more out, then that of the grafts on the clouen side.

9. To the end that you may not faile of this worke of imping, you must principally take heed, not to ouer-cleaue the Stockes of your Trées. But before you widen the cleft of your wedges, binde, and goe about the Stocke with two or three turnes, and that with an Ozier, close drawn together, vnderneath the same place, where you would haue your cleft to end, that so your Socke cleaue not too farre, which is a very vsuall cause of the miscarrying of grafts, inasmuch as hereby the cleft standeth so wide and open, as that it cannot be shut, and so not grow together againe; but in the meane time spendeth it selfe, & breatheth out all his life in that place, which is the cause that the Stocke and the Graft are both spilt. And this falleth out most often in Plum-trees, and branches of trées. You must be carefull so to ioyne the rinds of your Grafts, and Plants, that nothing may continue open, to the end that the wind, moisture of the clay or Raine, running vpon the grafted place, do not get in: when the Plant cleaueth very straight, there is not any danger nor hardnesse in sloping downe the Graft. If you leaue it somewhat vneuen, or rough in some places, so that the saps both of the one and of the other may the better grow, and be glued together, when your grafts are once well ioyned to your Plants, draw out your Wedges very softly, lest you dis-

10.

place them againe, you may leaue there within the cleft some small end of a wedge of greene wood, cutting it very close with the head of the Stocke: Some cast glue into the cleft, some Sugar, and some gummed Waxe.

If the Stocke of the Plant whereupon you intend to graft, be not so thicke as your graft, you shall graft it after the fashion of a Goates foot, make a cleft in the Stocke of the Plant, not direct, but byas, and that smooth and euen, not rough: then apply and make fast thereto, the graft withall his Bark on, and answering to the barke of the Plant. This being done, couer the place with the fat earth and mosse of the Woods tyed together with a strong band: sticke a pole of Wood by it, to keepe it stedfast.

11.

Chap. IIII.

Grafting like a Scutcheon.

In grafting after the manner of a Scutcheon, you shall not vary nor differ much from that of the Flute or Pipe, saue onely that the Scutcheon-like graft, hauing one eylet, as the other hath yet the wood of the tree whereupon the Scutcheon-like graft is grafted, hath not any knob, or budde, as the wood whereupon the graft is grafted, after the manner of a pipe.

12. In Summer when the trees are well replenished with say, and that their new Siens begin to grow some-what hard, you shall take a shoot at the end of the chiefe branches of some noble and reclaimed tree, whereof you would faine haue some fruit, and not many of his old store or wood, and from thence raise a good eylet, the tayle and all thereof to make your graft. But when you choose, take the thickest, and grossest, diuide the tayle in the middest, before you doe any thing else, casting away the leafe (if it be not a Peare-plum-tree: for that would haue two or three leaues) without remouing any more of the said tayle: afterward with the point of a sharpe knife, cut off the Barke of the said shoote, the patterne of a shield, of the length of a nayle.

13. In which there is onely one eylet higher then the middest together, with the residue of the tayle which you left behinde: and for the lifting vp of the said graft in Scutcheon, after that you haue cut the barke of the shoot round about, without cutting

ting of the wood within, you must take it gently with your thumbe, & in putting it away you must presse vpon the wood from which you pull it, that so you may bring the bud and all away together with the Scutcheon: for if you leaue it behinde with the wood, then were the Scutcheon nothing worth. You shall finde out if the Scutcheon be nothing worth, if looking within when it is pulled away from the wood of the same sute, you finde it to haue a hole within, but more manifestly, if the bud doe stay behind in the Wood, which ought to haue bẽn in the Scutcheon.

Thus your Scutcheon being well raised and taken off, hold it a little by the tayle betwixt your lips, without wetting of it, euen vntill you haue cut the Barke of the tree where you would graft it, and looke that it be cut without any wounding of the wood within, after the manner of a crutch, but somewhat longer then the Scutcheon ẏ you haue to set in it, and in no place cutting the wood within; after you haue made incision, you must open it, and make it gape wide on both sides, but in all manner of gentle handling, and that with little Sizers of bone, and separating the wood and the barke a little within, euen so much as your Scutcheon is in length and breadth: you must take heed that in doing hereof, you doe not hurt the Barke. 14.

This done, take your Scutcheon by the end, and your taile which you haue left remaining, and put into your incision made in your tree, lifting vp softly your two sides of the incision with your said Sizers of bone, and cause the said Scutcheon to ioyne, and lye as close as may be, with the wood of the tree, being cut, as aforesaid, in waying a little vpon the end of your rinde: so cut and let the vpper part of your Scutcheon lye close vnto the vpper end of your incision, or barke of your said tree: afterward binde your Scutcheon about with a band of Hempe, as thicke as a pen of a quill, more or lesse, according as your tree is small or great, taking the same Hempe in the middest, to the end that either part of it may performe a like seruice; and wreathing and binding of the said Scutcheon into the incision of the Tree, and it must not be tyed too strait, for that would keepe it from taking the ioyning of the one sap to the other, beeing hindred thereby, and neither the Scut- 15.

cheon, nor yet the Hempe must be moist, or wet: and the more fastly to binde them together, begin at the backe side of the Tree, right ouer against the middest of the incision, and from thence come forward to ioyne them before, aboue the eylet and tayle of the Scutcheon, crossing your band of Hempe, so oft as the two ends meet, and from hence returning backe againe, come about and tie it likewise vnderneath the eylets: and thus cast about your band still backward and forward, vntill the whole cleft of the incision bee couered aboue and below with the said Hempe, the eylet onely excepted, and his taile which
17. must not be couered at all; his tayle will fall away one part after another, and that shortly after the ingrafting, if so bee that the Scutcheon will take. Leaue your trees and Scutcheons thus bound, for the space of one moneth, and the thicker, a great deale longer time. Afterward looke them ouer, and if you perceiue thē to grow together, vntie them, or at the least-wise cut the Hempe behinde them, and leaue them vncouered. Cut also your branch two or three fingers aboue that, so the impe may prosper the better: and thus let them remaine till after Winter, about the moneth of March, and Aprill.

18. If you perceiue that your bud of your Scutcheon do swell and come forward: then cut off the tree three fingers or thereabouts, aboue the Scutcheon: for if it bee cut off too neere the Scutcheon, at such time as it putteth forth his first blossome, it would be a meanes greatly to hinder the flowring of it, and cause also that it should not thriue and prosper so well after that one yeere is past, and that the shoote beginneth to bee strong: beginning to put forth the second bud and blossome, you must goe forward to cut off in byas-wise the three fingers in the top of the tree, which you left there, when you cut it in the yeere going before, as hath been said.

19. When your shoote shall haue put foorth a great deale of length, you must sticke downe there, euen hard ioyned thereunto, little stakes, tying them together very gently and easily; and these shall stay your shootes and prop them vp, letting the winde from doing any harme vnto them. Thus you may graft white Roses in red, and red in white. Thus you may graft two or three scutcheons: prouided that they bee all of one side: for they will not be set equally together in height,

because then they would bee all starvelings, neither would they be directly one over another; for the lower would stay the rising up of the sap of the tree, and so those above should consume in penurie, and undergoe the aforesaid inconvenience. 20

You must note, that the scutcheon which is gathered from the Eien of a tree whose fruite is sowre, must be cut in square forme, and not in the plaine fashion of a scutcheon. It is ordinarie to graffe the sweet Quince tree, ballard Peach tree, Apricock tree, Iuiube tree, sowre Cherry tree, sweet cherry tree, & Chestnut tree, after this fashion, howbeit they might be grafted in the cleft more easily, & more profitably, although diuers be of contrary opinion, as thus best: Take the grafts of sweet Quince tree, and ballard Peach tree, of the fairest wood, and best fed that you can finde, growing vpon the wood of two yeeres old, because the wood is not so firme nor solid 21
as the others: and you shall graffe them vpon small Plum tree stockes, being of the thicknesse of ones thumbe; the se you shall cut after the fashion of a Goates foot: you shall not goe about to make the cleft of any more sides then one, being about a foote high from the ground; you must open it with your small wedge: and being thus grafted, it will seeme to you that it is open but of one side; afterward you shall wrap it vp with a little Mosse, putting thereto some gummed Wax, or clay, and binde it vp with Oziers to keepe it surer, because the stocke is not strong inough it selfe to hold it, and you shall furnish it euery manner of way as others are dealt withall: this is most profitable.

The time of grafting.

All moneths are good to graft in, (the moneth of October and Nouember onely excepted) But commonly, graft at that time of the winter, when sap beginneth to arise.

In a cold Countrey graft later, and in a warme countrey earlier.

The best time generall is from the first of February, vntill the first of May.

The grafts must alwayes bee gathered, in the old of the Moone.

For grafts, choose shootes of a yeere old, or at the furthermost two yeeres old.

If you must carry grafts farre, pricke them into a Turnep newly gathered, or lay earth about the ends.

If you set stones of Plummes, Almonds, Nuts, or Peaches: First let them lye a little in the Sunne, and then steepe them in Pitke or Water, three or foure dayes before you put them into the earth.

Dry the kernels of Pippins, and sow them in the end of November.

The stone of a Plum-tree must be set a foot deepe in November, or Februarie.

The Date stone must be set the great end downwards, two cubits deepe in the earth, in a place enriched with dung.

The Peach stone would be set presently after the Fruit is eaten, some quantitie of the flesh of the Peach remaining about the Stone.

If you will haue it to be excellent, graft it afterward vpon an Almond tree.

The little Siens of Cherry-trees, grown thick with haire, rots, and these also which doe grow vp from the rootes of the great Cherry-trees, being remoued, doe grow better and sooner then they which come of stones: but they must bee remoued and planted while they are but two or three yeeres old, the branches must be lopped.

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THE HVSBAND-MANS FRVITFVLL ORCHARD.

For the true ordering of all ſorts of fruits in their due ſeaſons; and how double increaſe commeth by care in gathering yeere after yeere: as alſo the beſt way of carriage by Land or by Water: With their preſeruation for longeſt continuance.

Cherries.

OF all ſtone Fruit, Cherries are the firſt to be gathered: of which, though we reckon foure ſorts; Engliſh, Flemiſh, Gaſcoyne & Black, yet are they reduced to two, the early, and the ordinarie: the early are thoſe whoſe grafts came firſt from France and Flanders, and are now ripe with vs in May: the ordinarie is our owne naturall Cherry, and is not ripe before June; they muſt be carefully kept from Birds, either with nets, noiſe, or other induſtry.

Gathering of Cherries.

They are not all ripe at once, nor may be gathered at once, therefore with a light Ladder, made to ſtand of it ſelfe, without hurting the boughes, mount to the tree, and with a gathering hooke, gather thoſe which be full ripe, and put them into your Cherry-pot, or Lybzey hanging by your ſide, or vpon any bough you pleaſe, and be ſure to breake no ſtalke, but that the cherry hangs by; and pull them gently, lay them downe tenderly, and handle them as little as you can.

To carry Cherries.

For the conueyance or portage of Cherries, they are beſt to be carried in broad Baſkets like Hines, with ſmooth peel-

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ding bottomes, onely two broad laths going along the bottome: and if you doe transport them by Ship, or Boat, let not the Vines be fill'd to the top, lest setting one vpon another, you bruise and hurt the Cherries: if you carry by horsebacke, then Pannyers well lined with Fearne, and packt full and close is the best and safest way.

Other stone fruit. Now for ỹ gathering of all other stone-fruit, as Nectarines, Apricocks, Peaches, Peare-plummes, Damsons, Bullas, and such like, although in their seuerall kindes, they seeme not to be ripe at once on one tree: yet when any is ready to drop from the tree, though the other seeme hard, yet they may also be gathered, for they haue receiued the full substance the tree can giue them; and therefore the day being faire, and the dew drawne away; set vp your Ladder, and as you gathered your Cherries, so gather them: onely in the bottomes of your large Vines, where you part them, you shall lay Nettles, and likewise in the top, for that will helpe to ripen those that are most vnready.

Gathering of Peares. In gathering Peares, are three things obserued; to gather for expence, for transportation, or to sell to the Apothecarie. If for expence, and your owne vse, then gather them as soone as they change, and are as it were halfe ripe, and no more but those which are changed, letting the rest hang till they change also: for thus they will ripen kindely, and not rot so soone, as if they were full ripe at the gathering. But if your Peares be to be transported farre either by Land or Water, then pull one from the tree, and cut it in the middest, and if you finde it hollow about the choare, and the kernell a large space to lye in: although no Peare be ready to drop from the tree, yet then they may be gathered, & then laying them on a heape one vpon another, as of necessitie they must be for transportation, they will ripen of themselues, and eate kindely: but gathered before, they will wither, shrinke and eate rough, losing not onely their taste, but beauty. Now for the manner of gathering; albeit some climbe into the trees by the boughes, and some by Ladder, yet both is amisse: the best way is with the Ladder before spoken of, which standeth of it selfe, and with a basket and a line, which being full, you must gently let downe, and keeping the string still in your hand, being emptied, draw it vp

againe, and so finish your labour, without troubling your selfe, or hurting the tree.

Now touching the gathering of Apples, it is to bee done according to the ripening of the fruit; your Summer Apples first, and the Winter after. For Summer Fruit, when it is ripe, some will drop from the tree, and birds will bee picking at them: But if you cut one of the greenest, and finde it as was shew'd you before of the Peare: then you may gather them, and in the house they will come to their ripenesse and perfection. For your Winter fruit, you shall know the ripenesse by the obseruation before shewed; but it must be gathered in a faire, Sunny, and dry day, in the wayne of the Moone, and no winde in the East, also after the deaw is gone away: for the least wet or moisture will make them subiect to rot and mill-dewe: also you must haue an apron to gather in, and to empty into the great baskets, and a hooke to draw the boughs vnto you, which you cannot reach with your hands at ease: the apron is to be an ell euery way, loopt vp to your girdle, so as it may serue for either hand without any trouble: and when it is full, vnloose one of your loopes, and empty it gently into the great Basket, for in throwing them downe roughly, their owne stalkes may pricke them; and those which are prickt, will euer rot. Againe, you must gather your fruit cleane without Leaues or Bunts, because the one hurts the tree, for euery bunt would be a stalke for fruit to grow vpon: the other hurts the fruit by bruising, and pricking it as it is laid together, and there is nothing sooner rotteth fruit, then the greene and withered leaues lying amongst them; neither must you gather them without any stalke at all: for such fruit will begin to rot where the stalke stood. Gathering of Apples.

For such fruit as falleth from the trees, and are not gathered, they must not be laid with the gathered fruit: and of fallings there are two sorts; one that fals through ripenesse, and they are best, and may be kept to bake or roast: the other windfals, and before they are ripe; and they must bee spent as they are gathered, or else they will wither and come to nothing: and therefore it is not good by any meanes to beat downe fruit with Poales, or to carry them in Carts loose and togging, or in sacks where they may be bruised. To vse the fallings.

Carriage of fruit.

When your fruit is gathered, you shall lay them in deepe Baskets of Wicker, which will containe foure or five bushels, and so betweene two men, carry them to your Apple Loft; and in shooting or laying them downe, be very carefull that it bee done with all gentlenesse, and leasure, laying euery sort of fruit seuerall by it selfe: but if there be want of roome, hauing so many sorts that you cannot lay them seuerally, then such some fruit as is neerest in taste and colour, and of winter fruit, such as will taste alike, may, if need require, be layd together, and in time you may separate them, as shall bee shewed hereafter. But if your fruit bee gathered faire from your Apple Loft, then must the bottomes of your Baskets be lined with greene Ferne, and draw the stubborne ends of the same through the Basket, that none but the soft leafe may touch the fruit, and likewise couer the tops of the baskets with Ferne also, and draw small cord ouer it, that the Ferne may not fall away, nor the fruit scatter out, or iogge vp and downe: and thus you may carry fruit by Land or by Water, by Boat, or Cart, as farre as you please: and the Ferne doth not onely keepe them from bruising, but also ripens them, especially Peares. When your fruit is brought to your Apple Loft or store-house, if you finde them not ripened inough, then lay them in thicker heapes vpon Ferne, and couer them with Ferne also: and when they are neere ripe, then vncouer them, and make the heapes thinner, so as the ayre may passe thorow them: and if you will not hasten the ripening of them, then lay them on the bare boords without any Ferne at all. Now for Winter, or long lasting Peares, they may be packt either in Ferne or Straw, and carried whither you please; and being comne to the iourneys end, must be laid vpon sweet straw; but beware the roome bee not too warme, nor windie, and too cold, for both are hurtfull: but in a temperate place, where they may haue ayre, but not too much.

Of Wardens.

Wardens are to be gathered, carried, packt, & laid as winter Peares are.

Of Medlers.

Medlers are to be gathered about Michaelmas, after a frost hath toucht them; at which time they are in their full growth, and will then be dropping from the tree, but neuer ripe vpon

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the tree. When they are gathered, they must be layd in a basket, siue, barrell, or any such caske, & wrapt about with woollē cloathes, vnder, ouer, and on all sides, and also some waight laid vpon them, with a boord betweene: for except they bee brought into a heate, they will neuer ripen kindly or taste well. Now when they haue laine till you thinke some of them bee ripe, the ripest, still as they ripen, must be taken from the rest: therfore powre them out into another siue or basket leasurely, that so you may well finde them that be ripest, letting the hard one fall into the other basket, and those which bee ripe laid aside: the other that be halfe ripe, seuer also into a third siue or basket: for if the ripe, and halfe ripe be kept together, the one will be mouldy, before the other be ripe: And thus doe, till al be throughly ripe.

Quinces should not bee laid with other fruite; for the sent is offensiue both to other fruite, and to those that keepe the fruit or come amongst them: therefore lay them by themselues vpon sweet strawe, where they may haue ayre enough: they must be packt like Pedlers, and gathered with Pedlers. Of Quinces

Apples must be packt in Wheate or Rye straw, & in maunds or baskets lyned with the same, and being gently handled, will ripen with such packing and lying together. If seuerall sorts of apples be packt in one maund or basket, then between euery sort, lay sweet strawe of a pretty thicknes. To packe Apples.

Apples must not be powred out, but with care and leasure: first, the straw pickt cleane from them, and then gently take out euery seuerall sort, and place them by themselues: but if for want of roome you must mixe the sorts together, then lay those together that are of equall lasting; but if they haue all one taste, then they need no separation. Apples that are not of like colours should not be laid together, and if any such bee mingled, let it be amended, and those which are first ripe, let them be first spent; and to that end, lay those apples together, that are of one time of ripening: and thus you must vse Pippins also, yet will they indure bruises better then other fruite, and whilst they are greene will heale one another. Emptying and laying Apples.

Pippins, though they grow of one tree, and in one ground, yet some will last better then other some, and some will bee bigger then others of the same kinde, according as they Difference in Fruit.

haue moze oz leſſe of the ſun, oz moze oz leſſe of the dzoppings of the trees oz vpper bzanches: therefoze let every one make moſt of that fruite which is faireſt, & longeſt laſting. Againe, the largeneſſe & goodnes of fruite conſiſts in ẏ age of the tree: foz as the tree increaſeth, ſo the fruite increaſeth in bigneſſe, beauty, taſte and firmnes: & otherwiſe, as it decreaſeth.

Tranſporting fruit by water.

If you be to tranſpoꝛt your fruite farre by water, then pzouide ſome dzy hogges-heads oz barrells, and packe in your apples, one by one with your hand, that no empty place may be left, to occaſion ſogging; and you muſt line your veſſell at both ends with fine ſweet ſtraw; but not the ſides, to auoyd heate: and you muſt boze a dozen holes at either end, to receiue ayze ſo much the better; and by no meanes let them take wet. Some vſe, that tranſpoꝛt beyond ſeas, to ſhut the fruite vnder hatches vpon ſtraw: but it is not ſo good, if caſke may be gotten.

When not to trãſport fruite.

It is not good to tranſpoꝛt fruite in March, when the wind blowes bitterly, noꝛ in froſty weather, neither in the extreme heate of Summer.

To conuay ſmall ſtore of fruite.

If the quantitie be ſmall you would carry, then you may carry them in Dolſers oz Panniers, pzouided they be euer filled cloſe, and that Cherries and Peares be lined with greene Feerne, and Apples with ſweet ſtraw; and that, but at the bottomes and tops, not on the ſides.

Roomes for fruit.

Winter fruite muſt lye neither too hot, noꝛ too cold; too cloſe, noꝛ too open: foz all are offenſiue. A lowe roome oz Celler that is ſweet, and either boozded oz paued, and not too cloſe, is good, from Chziſtmas till March: and roomes that are ſeeled ouer head, and from the ground, are good from March till May: then the Celler againe, from May till Michaelmas. The apple loft would be ſeeled oz boozded, which if it want, then take the longeſt Rye ſtraw, and raiſe it againſt ẏ walls, to make a fence as high as the fruite lieth; & let it be no thicker then to keepe the fruite from the wall, which being moyſt, may doe hurt, oz if not moyſt, then the duſt is offenſiue.

Sorting of Fruit.

There are ſome fruit which will laſt but vntill All-hallontide: they muſt be laid by themſelues; then thoſe which will laſt till Chziſtmas, by themſelues: then thoſe which will laſt till it be Candlemas, by themſelues: thoſe which will laſt till

Shroue-tide, by themselues: & Pippins, Apple-Johns, Peare-maines, and winter-Russetings, which will last all the yeere, by themselues.

Now if you spy any rotten fruit in your heapes, pick them out, and with a Trey for the purpose, see you turne the heaps ouer, and leaue not a tainted Apple in them, dividing the hardest by themselues, and the broken skinned by themselues to be first spent, and the rotten ones to be cast away; and euer as you turne them, and picke them, vnder-lay them with fresh straw: thus shall you keepe them sake for your vse, which otherwise would rot suddenly.

Pippins, John-Apples, Peare-maines, and such like long-lasting fruit, need not bee turned till the weeke before Christmas, vnlesse they be mixt with other of a riper kind, or that the fallings be also with them, or much of the first straw left amongst them: the next time of turning is at Shroue-tide, and after that, once a moneth till Whitson-tide; and after that, once a fortnight; and euer in the turning, lay your heapes lower and lower, and your straw very thinne: prouided you doe none of this labour in any great frost, except it bee in a close Celler. At euery thawe, all fruit is moist, and then they must not be touched; neither in rainy weather, for then they will be danke also: and therefore at such seasons it is good to set open your windowes, and doores, that the ayre may haue free passage to dry them, as at nine of the clocke in the fore-noone, and foure in the afternoone in Winter; and at fiue in the fore-noone, and at eight at night in Summer: onely in March, open not your windowes at all. Times of stirring fruit.

All lasting fruit, after the middest of May, begin to wither, because then they ware dry, and the moisture gone, which made them looke plumpe: they must needs wither, and bee smaller; and nature decaying, they must needs rot. And thus much touching the ordering of fruits. Shriueling of fruit.

FINIS.

THe Booke of *Bees*, called the *feminine Monarchy*, written heretofore by M^r. *Charles Butler*, and now so much *desired*, shall shortly be set forth againe, corrected and augmented by the *Authors* further *experience*.

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